REMARKS

Claims 1-2 and 4-16 are pending in this application. By this Amendment, claim 1 is amended to incorporate the features of claim 3. Claim 3 is canceled without prejudice to, or disclaimer of, the subject matter disclosed therein. No new matter is added. Reconsideration and withdrawal of the rejections in view of the foregoing amendments and the following remarks is respectfully requested.

Applicant appreciates the courtesies shown to Applicant's representatives by Examiner Jankus in the November 16 personal interview. Applicant's separate record of the substance of the interview is incorporated into the following remarks.

Applicant thanks the Examiner for the indication that claims 8, 15 and 16 contain allowable subject matter.

Claims 1-7 and 9-12 are rejected under 35 U.S.C. §102(b) over "Constructing Easily Invertible Bézier Surfaces that Parametrize General Quadrics" by Teller et al. (Teller). Claims 13 and 14 are rejected under 35 U.S.C. §102(b) over "Using AutoCAD Release 13 for Windows" by Zirbel et al. (Zirbel). These rejections are respectfully traversed.

The rejections of independent claim 1 are rendered moot by the incorporation of the subject matter of claim 3 into claim 1.

Amended independent claim 1 recites and independent claim 13 similarly recites, *inter alia*, "determining a bounding box" and "calculating vector angles for a starting vector and ending vector."

Teller teaches a geometric construction of Bézier surfaces parametrize quadrics (Abstract).

Zirbel teaches drawing an ellipse based on its center point, major axis and minor axis.

Figure 2 of Teller, relied upon by the Office Action as disclosing the features of original claim 3, merely shows the intersection of two vectors that are tangential to an arc of an ellipse. No bounding box, as recited in claim 1, is taught or disclosed. Furthermore, no starting vectors or ending vectors, as recited in claim 1, are taught or disclosed. The Office Action asserts that Fig. 2 of Teller shows a quadrant of the bounding box for an ellipse of the quarter bounding box which would have corresponding vectors at 90° from the center of the ellipse to the tangent points. However, the figure relied upon by the Office Action (Fig. 2 of Teller) does not show the length of the ellipse relative to its circumference. Accordingly, Teller and Zirbel cannot reasonably be considered to teach or suggest each and every feature of claims 1 and 13.

With respect to claim 4, Teller fails to teach or suggest the determining of a starting point and ending point of each of the plurality of sub-arcs. Figure 2 relied on by the Office Action, only shows a single arc and no sub-arcs. Accordingly, Teller fails to teach or disclose each and every feature of claim 4.

With respect to claim 6, Teller fails to teach or disclose determining a mid-point of an arc chord. Fig. 1 and page 304 of Teller cited by the Office Action, at best, shows a point on the arc. There is no point on the arc chord. Accordingly, as acknowledged by the Examiner during the November 16, 2006 personal interview, Teller fails to teach or disclose each and every feature of claim 6.

With respect to claim 7, Fig. 1 of Teller, relied upon by the Office Action, at best, only shows a segment from the control point to a point on the curve. Fig. 1 of Teller does not show or suggest a mid-point or an arc chord. Accordingly, as acknowledged by the Examiner during the November 16, 2006 personal interview, Teller fails to teach or disclose each and every feature of claim 7.

With respect to amended claim 13, page 446, Fig. 15.16 of Zirbel, relied upon by the Office Action, fails to show a sub-arc being defined by a conic curve definition. Accordingly, Zirbel fails to teach or suggest each and every feature of claim 13.

For at least these reasons, independent claims 1 and 13, and their dependent claims, are patentable over the applied references. Thus, withdrawal of the rejections of the claims is respectfully requested.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of the pending claims are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,

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